# ¿Qué Pasa?
# Are ELL Students Remaining in English Learning Classes Too Long?

A Tomás Rivera Policy Institute Full Report


The Tomás Rivera Policy Institute (TRPI) advances informed policy on key issues affecting Latino communities through objective and timely research contributing to the betterment of the nation.

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# Qué Pasa?
# Are ELL Students Remaining in English Learning Classes Too Long?

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# Executive Summary

A new study by the Tomás Rivera Policy Institute (TRPI) demonstrates that English Language Learners (ELLs) [1] who learn English at school can do better academically than native English speakers, and that the window for mastering the English language is wider than previously thought. Typically ELLs perform at lower levels than their English-fluent peers, according to past studies, which also have suggested a variety of causes and possible remedies. The recent TRPI research simply spotlights the critical need for ongoing language education in our schools—despite the present policy debate about the best way to do it.

The TRPI study was based on an analysis of complete official records for the 28,714 students who were in the 6th grade in 1999 in the Los Angeles Unified School District (LAUSD). Our study revealed that even after ruling out other factors, students who gained sufficient English skills to be moved from English learning classes to mainstream English classes demonstrated improved performance. Also, the reclassification of students as English proficient was associated with improved performance beyond the middle school years, and this relationship was slightly larger for foreign-born English learners than native-born English learners. It is worth noting that a substantial proportion of students in the study began the English-learning process in kindergarten, yet in eight years of schooling never managed to be moved into mainstream English classes.

The results of this investigation into the nation's second largest school district are critical for the education and retention of non-English speakers throughout school systems in the United States. The surprising result is that students who are reclassified even as late as eighth grade perform at much the same level on measurable high school outcomes as those who are reclassified earlier, while controlling for previous academic performance. Indeed, reclassification at any point during the middle school years was associated with improved likelihood that a student would stay in the 9th grade, pass the California exit exam (CAHSEE), take an Advanced Placement (AP) course in high school, or stay in high school.

Among educators, finding the best path to long-term education and retention of ELL students is a top concern. This TRPI study clearly demonstrates the need for stepped up English language learning efforts targeting both native-born and foreign-born populations.

[1] In the literature and in this study, English language learning students are sometimes referred to as English language learners (ELLs), English learners (ELs), or as English as a second language students (ESLs).

## Background

TRPI embarked on this study when a deep review of the literature did not reveal considerable direct evidence on how reclassification might affect academic performance. Previous research in this area tends to vary with results born of cross-sectional studies or analysis of a single school or district. Rarely is it drawn from large sample sizes as the case of TRPI's findings, where the sheer number of students analyzed lends credibility. In addition, the analysis relied on data collected by a large school district rather than studying the efficacy of a particular program.

Current literature does contain significant research into the educational success of ELL students, offering consensus in several areas of interest. First, ELL students generally score lower than their English-only peers on standardized academic tests (Lam, 1993; de Jong, 2004), though explanations vary. Lam (1993) suggested test score discrepancies between ELLs and mainstream students are due to lower levels of English proficiency, but later Wang and Goldschmidt (1999) found academic preparation to have a larger effect. Callahan (2005), in a review of education research, also suggested that ELL students possibly undergo an education inferior to that of English proficient students. For example, English language learners typically are assigned to less qualified teachers, provided with an inferior curriculum, housed in inferior facilities, and segregated from English-speaking peers (i.e. Gandara and Rumberger, 2003; Katz, 1999). In addition, courses designed for English language learners focus on English language acquisition, rather than content, exercising rote skills rather than developing complex reasoning skills (Katz, 1999; Olsen, 1995; Harklau, 1994).

Interestingly, there is evidence that students with a solid foundation in a primary language other than English tend to academically outperform their English-only peers (Schwartz and Stiefel, 2006). Some scholarship suggests that this may be due to cognitive differences between monolingual and bilingual students, such as concept formation and symbolic flexibility (Peal and Lambert, 1962; Hakuta, 1986; Bialystock and Hakuta, 1994). Multivariate analysis indicates that the causal order begins with bilingualism and follows with cognitive development, instead of vice versa (Hakuta and Diaz, 1985). More extensive research has suggested that standardized test scores and GPA are generally higher for bilingual students than monolingual students (Buriel, 1994; Edsource 2008; Rumbaut, 1990; Rumbaut, 1995; Stanton-Salazar and Dornbusch, 1995; Valverde 1987). This may suggest that reclassified students may even outperform English only students.

Research also suggests differences in the performance of English learners across a variety of indicators, including math and reading, grades and graduation, and school and teacher characteristics. First, research on language learning and academic performance suggest that outcomes are split between foreign- and native- born students, along the lines of math and reading (Edsource, 2008; Callahan, 2005). Second, research on academic performance is split along grades and graduation, again with mixed results concerning differences between students of similar race but different nativity (Rumberger and Larson, 1998; Driscoll, 1999; Zau and Betts, 2008; Padilla and Gonzalez, 2001).

Third, research on English language learners, nativity and academic performance is split along geography (Ellen et al, 2002; Schwartz and Chellman, 2007; Schwartz and Stiefel, 2006; Jepsen and de Alth, 2005). In the New York public school system, Schwartz and Stiefel (2004) find that there are more qualified teachers per capita in schools with denser concentrations of immigrant students. However, in California, unlike New York, English language learners are almost four times as likely to be assigned to uncredentialed teachers (Gandara and Rumberger, 2003). In addition, Callahan et al (2009) find that, in schools with a high concentration of immigrants, the effect of ESL placement is positive on first and second generation immigrants' high school GPA, course completion, and enrollment in college preparatory classes. However, whereas Callahan et al's (2009) research focused on the effects of English language learning on late high school academic achievement, Latinos in LAUSD have a high dropout rate in early high school (Silver et al, 2008). This suggests that in districts with large numbers of Latinos, the effects of English language learning on early high school academic achievement still have yet to be investigated.

Only recently has research begun to employ longitudinal designs to determine the benefits or costs of reclassification for students. Robinson (2009) argues that if EL students come from a well-designed English learning environment, and are reclassified into a suitable English only environment, there should be no benefit or cost of being reclassified. In theory, reclassification could be a negative event if the removal of the English learning instruction and other support services leaves a reclassified student in an inferior academic environment. As mentioned earlier, the students leaving EL classes may, on the other hand, perform better if they are exposed to higher levels of academic instruction. The Robinson (2009) study finds no significant benefit or cost of reclassification in a single urban school district.

In sum, there have been mixed findings concerning the relationship between English language proficiency and academic outcomes. Our study, however, was able to analyze not only a large cohort of diverse students, but to follow the students from sixth grade to graduation, as well as incorporate retrospective data. This allowed us to examine a variety of outcomes that measure not only test scores, but several discrete outcomes that previous research has not been able to analyze, such as failing 9th grade, passing the CAHSEE, and taking AP classes.

## Research Approach

Research suggests that the academic outcomes of students who learn English as a second language can differ by nativity, ethnicity, and school level characteristics. Our study's central concern focuses on whether reclassification to English language proficiency is associated with improved academic performance by English language learners. To this end, we tested for differences across ethnicity and nativity, and we tested for the effect and timing of English acquisition on six outcome variables:

- 8th grade SAT9 reading comprehension scores
- 8th grade SAT9 math scores
- 9th grade retention
- Taking high school AP course
- Passing the California exit exam (CAHSEE)
- Dropping out of high school

Because of the richness of the data, we were able to control for indicative school differences that might correlate with academic success, such as the percentage of students on free or reduced lunch, who were foreign-born, and who were not proficient by 5th grade, as well as the number of teachers with credentials and percentage of peers in the same racial group in a particular school.[2, 3]

It must be emphasized, however, that this TRPI analysis is not an evaluation of a particular ELL pedagogy, such as bilingual education, English-only immersion, or dual-language immersion. The oft-contentious debate about best type of program has been active for decades and won't be resolved in this analysis. There is, however, a growing consensus emphasizing that quality over type of program is more likely to yield positive results.

[2] See Appendix B for variable list.

[3] See Appendix C for case selection and number of cases missing.

# Study Design

## Data and Method

In fall of 2006, the Latino Scorecard Team (LSEAT) obtained access to official LAUSD student records including courses, standardized test results, English proficiency test results, and demographic characteristics. TRPI, as part of its involvement with LSEAT, cleaned and merged the records of the entire cohort of 6th grade students into a longitudinal dataset and tracked each student over a six-year period. Current literature on immigrants and English learners lacks large sample sizes and longitudinal studies. Such studies are important, as research on the Los Angeles Unified School district suggests that a disproportionate number of students who drop out between the 9th and 10th grade are Latinos and English language learners (Silver et al, 2008).

To test for the effect of reclassification on academic outcomes, we estimated ordinary least squares (OLS) and logistic regression models as shown in Equation 1:

$$Y_{ij} = a_o + \beta_1 RC_{ij} + \beta_2 CH_{ij} + \beta_3 SC_{ij} + \varepsilon_i + w_i$$

In Equation 1, **Y** represents the dependent variables, **RC** indicates the grade of reclassification for the child (not reclassified by 8th grade is the omitted category), **CH** is a vector of child-specific characteristics, and **SC** is a vector of school characteristics. The unit of analysis, **i**, is the child, and **j** indexes the school. $\varepsilon$ is the error term associated with the child, and is the error term associated with the school. For models using dependent variables with linear measures, such as SAT9 standardized test scores, we used OLS regression. When estimating effects on the other outcome variables, which are dichotomous, we used logistic regression, and presented the results as odds ratios.[4]

## Dependent Variables

The main dependent variables in this study are: 8th Grade SAT9 reading comprehension scores, 8th Grade SAT9 mathematics scores, passing the CAHSEE, taking an AP course, 9th grade retention, and dropping out of high school. The two SAT9 measures are linear variables, while all other variables are dichotomous. We used all of these measures in our analyses, as opposed to only some or a factor of test scores, because previous research has relied on separate analyses involving these outcomes and we sought to compare differences.

## Independent Variables

Past education research suggests that a student's socioeconomic background and school environment (e.g., Cannon et al, 2006) are likely to play a role in determining educational attainment. In these data, we were able to denote a student's gender, racial background, and nativity, but we did not have information on socioeconomic status.

There are a number of school level variables that may be relevant for the success of English learners. We included the percent of fully credentialed teachers. We noted whether the school is a Title 1 school because it is a proxy for disadvantage and may suggest the presence of additional funding. Also, many schools in LAUSD have multiple tracks. The extent to which disadvantaged students are tracked together and away from possibly positive English-speaking academic role models could hinder language learning.

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[4] Log odds ratios reveal the change in odds of success versus odds of failure according to the independent variable. For example, an odds ratio of 2 for the dependent variable "failed 9th grade" suggests that a value of 1 in the specified independent variable results in a ratio of retained/not-retained twice as high as that of the retained/not-retained ratio with a value of 0 in the specified independent variable.

[5] Excluded from the analysis were students missing data, in special education, or who left LAUSD between the 8th and 12th grades.

We used three measures of peer composition in light of research suggesting peer performance can influence success (e.g., Levine and Painter, 2008). One tracking method is to consider the percentage of the school that has not been reclassified by 5th grade. In addition, the percentage of foreign-born and racial groups may account for some degree of isolation for the language learners. Callahan et al (2009) also found different levels of success for EL students based on the percent of foreign-born in the school, perhaps owing to the greater preparation of teachers in these schools.

## Summary Statistics

The main analysis of our study focused on English-learning students, but we first analyzed the entire sample of 6th grade students in LAUSD in 19995. The sample (see Table 1) was predominantly native-born (78.3%), of a racial or ethnic minority (90.6%), economically disadvantaged (98% on free or reduced lunch), and generally attended school with peers of the same race (65.9% of the school was comprised of the student's own race), suggesting a high degree of segregation in schools across the district. The average middle school in our sample period had only 67.8% fully certified teachers. One-third of our sample was enrolled at a school with multiple academic calendar tracks.

In this sample, a minority of students were English-only (26.7%) or from a non-English speaking household but classified as initially fluent (8.2%). The remainder was English learners; English language learners reclassified by the 8th grade comprised 46.2% of the total sample, though 19% of the total sample was English language learners not reclassified by the end of middle school. In terms of the English learner population, it is important to note that although 27.5% of our total sample was comprised of reclassifications happened before middle school, a considerable percentage of our total sample was students reclassified during middle school (18.7 Surprisingly, most of the students who never reached reclassification (75.9% of them) had been considered English learners since at least the first grade; this illustrates that the sample of never-reclassified students was not dominated by recent immigrants. At most, only 5.5% of the never-reclassified students may have been immigrants entering the United States after the start of their educational career.

English learners were not reclassified uniformly over time (Table 2). Less than 5% were reclassified before 4th grade. The most frequent year (28.6% of English learners) for English proficiency reclassification was 5th grade. During middle school, 13.4% were reclassified in the 6th grade, 7.2% in the 7th grade, and 8.1% in the 8th grade. Nearly 30% of the sample of English learners was not reclassified by the end of 8th grade.[6]

As one might expect, English-only students and students who were reclassified perform better on our outcomes than students not reclassified (Table 3). The mean reading 8th grade test score for initially fluent cases was 51.54, followed by English-only cases (46.29) and reclassified cases (37.91); limited English proficiency cases lagged far behind (13.63). Math scores followed a similar pattern, with differences not quite as pronounced.

Overall, reclassified students' performance was similar to English-only students or those initially classified as English proficient. More than one-quarter of the reclassified students took an AP class compared with 16.6% of the English-only and 29.4% of the initially fluent. Reclassified students were about 4 percentage points more likely to fail the 9th grade than English-only students (25.1% vs. 21.3%), but were the least likely to drop out (23.9%). Finally, reclassified students were five percentage points more likely to pass the CAHSEE than English-only, but nearly 12 points less likely to pass than the students classified initially fluent in English. In all cases, the students who were not reclassified by the end of middle school performed substantially worse.

Table 4 presents differences in academic performance by nativity and racial groups. Although native-born students performed better than foreign-born students, differences were not large in most cases. The difference in 8th grade reading scores was most prominent (38.36 for native-born students versus 31.67 for foreign-born

[6] Data show only 0.04% were reclassified in the 9th grade. There is the possibility that others were reclassified after the 8th grade, although the data provided to us by the district does not indicate so.

students); least dramatic was the difference in who took an AP course. On the other hand, as other education research has noted, there are significant differences across racial groupings. White and Asian students performed better across all outcomes than Latino and black students. White students generally performed better than Asian students in reading and about equally in math; Asian students performed better than white students on the high school outcomes. There were no clear patterns on the differences between black and Latino students across all six outcomes; both groups performed better on some of the outcomes investigated.

## Results

Our primary analysis focused on the relationship between reclassification and academic outcomes among the sample of English learners. First, we investigated how demographic and school characteristics influenced performance on 8th grade SAT9 reading comprehension scores (Table 5: Model 1) using OLS regression methods.[7] As in Table 4, there were differences in demographic characteristics even after controlling for school characteristics. White and Asian students performed better than Latino and black students, and foreign-born students performed worse than native-born students. We also found that girls performed 2.59 points better than boys, and that students receiving a reduced or free lunch performed 5.06 points worse on the reading exam. As expected, students who changed schools performed worse than students remaining in the same middle school. Among school characteristics, students at a Title 1 school performed 11.62 points worse than students at other schools. We also found that students performed better in schools with more fully credentialed teachers and higher percentages of foreign-born students and students of the same racial group. The latter finding might imply that students perform better when they are not isolated from their racial and social groups. Finally, we found that students in middle schools with a larger number of students not reclassified by 5th grade performed worse than those with lower percentages of students not reclassified. This would imply a negative peer influence on non-reclassified students, perhaps hindering students who in another setting might fulfill their potential to be reclassified.

Controls were then established for reclassification and the timing of reclassification of English proficiency (Table 5: Model 2). At this point in our analysis, it became clear that there was a significant relationship between reclassification as English-proficient and performance. Reclassification before 3rd grade increased performance by 34 to 40 points – an impressive improvement given an average sample SAT9 Reading test score of 36.51. The differences between those classified as functional and proficient were largest at the 3rd grade juncture and diminished when compared with differences among those reclassified at 8th grade.

We also observed that students reclassified by 4th or 5th grade had test scores 23 to 28 points higher than those not reclassified by 8th grade, and that even students reclassified as late as 8th grade boasted test scores about 10 points higher than those not reclassified by 8th. The year a student was classified as an English Language Learner exhibited little effect, but its inclusion allowed us to control for the number of years spent as an EL before reclassification, a factor that research has indicated can impact academic achievement (Hakuta et al 1999). After controlling for reclassification, it was no longer true that foreign-born students performed worse, and the differences across racial and income categories were moderated.

The effect of reclassification on SAT9 reading comprehension performance is significant (Table 5: Model 2), but estimates are probably somewhat of an overstatement.[8] We could not control for the likelihood that a student would be reclassified, so the same factors that may have led a student to be reclassified also could have influenced performance on the 8th grade reading test. In other words, we were not able to control for unobserved factors

[7] National percentiles of test scores are standardized on a metric of 1-100. As a result, the standardized betas of the test score variables in our linear regression tables can be directly interpreted as unit increases in national percentile.

[8] When we conducted the similar analysis for the 8th grade SAT9 Math exam, we included the 6th grade SAT9 Math score.

such as family background or neighborhood environment, so the Model 2 estimates could be upwardly biased. To account for this, we included the past academic performance of students in the 6th grade.[9]

Table 5 (Model 3) presents the estimates of the relationship between reclassification and student performance, including 6th grade test scores. The control for baseline academic performance reduced the coefficients on reclassification substantially, but the variables remained statistically significant. The range of the effect of reclassification prior to middle school, net of its impact on 6th grade test scores, is from 8.51 if classified as functional in 5th grade, up to 11.71 if classified as proficient prior to 4th grade. Again, compared with a mean reading test score of 36.51, these remain large effects. After controlling for past academic performance, there are no longer differences by racial groups, and foreign-born students outperform native-born students (see Schwartz and Stiefel, 2006 for similar results from the New York public schools).

We next tested for the effects of demographic factors, school characteristics, and reclassification on student performance on the 8th grade SAT9 Math exam (Table 6). Results were qualitatively similar to the results on the SAT9 Reading exam, but the magnitudes of the coefficients differ. The one exception was females who performed more poorly than males in this math exam. The negative effects of being poorer or being from an African-American or Latino background were larger. This was seen as well at the school level, in which students in Title 1 schools performed on average 1 point worse on the Math exam.

The initial effect of controlling for reclassification was quite large (Table 6: Model 2). As seen before, the earlier a student was reclassified, the better the performance on the SAT9 Math exam. Again, because we were concerned that the ability to be reclassified as English functional or proficient could be related to later performance in math, we included a student's previous performance on the 6th grade SAT9 Math exam. Once we did this, the effect of reclassification fell dramatically. Effects remain significant, but the test score advantage is about 2 to 6 points, depending on the timing of reclassification.

## High School Outcomes

Although academic performance as measured by SAT9 test scores is important for policy makers, factors that influence graduation from high school and the pursuit of higher education are also of interest. Three outcomes in our study were tied to a student ultimately graduating from high school: not failing the 9th grade, passing the exit exam, and not dropping out. Table 7 presents the estimates for each of the outcome variables using odds ratios. As evidenced in the table (Model 1), and controlling for sixth grade performance, boys were much more likely to fail the ninth grade than girls. Race and nativity were not related to the probability of failing ninth grade. Surprisingly, receiving a free and reduced price lunch lowered the probability of failing after including other controls, but so few students in the English learner sample did not receive a free and reduced price lunch that it left little variation in this variable. The school level variables, while significant, did not greatly alter the odds of failing the ninth grade.

The most interesting results in this model (Table 7: Model 1) concerned the effect of the reclassification variables. After controlling for 6th grade performance, we found that being reclassified as English proficient or functional significantly lowered the odds of failing ninth grade. Further, odds of failing were reduced the most when reclassification occurred in middle school. For example, odds of failing ninth grade for a student reclassified as proficient in the 8th grade were half that of a student not reclassified by 8th. These large effects suggest that policy interventions to encourage and further English language learning during middle school will have considerable potential to keep students in high school through graduation.

[9] It should be noted that including past academic performance will not free this research design of all possible sources of bias. In particular, there could be factors outside of academic performance that teachers or educators may use in their evaluation of the reclassified student. For our strategy not to be sound, these factors have to predict future success, but not present performance. Alternative strategies have been employed by Robinson (2009) and Callahan (2009) that attempt to find observationally equivalent individuals and compare their outcomes. These strategies also fall short of the ideal because they are not able to find variables that predict reclassification that are unrelated to later academic performance.

The results pattern was similar when we estimated the probability of dropping out or passing the high school exit exam. Reclassification greatly lowered the odds of dropping out (Table 7: Model 2), and again, the probability was lowest for those reclassified later. It is important to keep in mind that some of the effects of earlier reclassification will show up in the 6th grade SAT9 scores. The importance of reclassification is also evident in the likelihood of passing the CAHSEE. Students boasted two to three times higher odds of passing if they were found to be English proficient or functional than the students who were not reclassified by 8th. Reclassification in middle school may be a critical factor, but it is not stronger than the effect of earlier reclassification. In terms of passing the CAHSEE, there were some racial differences. Asians were most likely to pass and Latinos least likely to pass after controlling for other outcomes. We also found girls were less likely to pass the exit exam, although they were less likely to drop out.

We do not know whether students went to college after leaving LAUSD, so we included a test for whether a student ever took an AP class; research has shown a link between taking college prep and advanced level classes and attending college (Keller and Tillman, 2008). With respect to demographic characteristics, girls' odds of taking an AP class were two times higher than boys and Asians were significantly more likely than whites. Again, school characteristics in our study did not generate large impacts, although many results were statistically significant. Students were more than twice as likely to take an AP class when reclassified by the end of middle school. Again we found the results to be at least as strong for those reclassified in middle school as those reclassified in elementary school.

## Academic Performance among English Language Learners by Nativity

Past research (e.g., Schwartz and Stiefel, 2006) found that after controlling for other factors, immigrants and native-borns differ in academic performance and, in some cases, immigrants outperform their native-born peers. Previous research has not, however, focused on a sample of English learners. Our results suggested nativity was not particularly important for academic outcomes. At the same time, we did find some evidence of higher test scores but also higher dropout rates among immigrants.

Performance on the SAT9 tests (Table 8: Model 1 and Model 2) suggested reclassification is associated with improved outcomes for both groups, but that this relationship is more positive for immigrant children. Reading scores (Table 8: Model 1) were up to 5 points higher for immigrant children depending on the timing of reclassification. Math scores (Table 8: Model 2), while higher, were not always statistically different from scores for native-born children (Table 6, Model 3). Across the outcomes in high school (Table 8: Models 3-6), the effect of reclassification was slightly stronger for immigrant students, but again, not all differences were statistically significant.

## Comparing English Learners with Other Students

As noted earlier, 65.2 percent of our sample was English learners, 26.7 percent from an English-only background, and 8.2 percent classified as initially fluent upon entering LAUSD. Our final tests investigated whether reclassified students were able to perform as well as their English-only counterparts after controlling for other variables in a multivariate setting. Table 3 previously demonstrated that reclassified students performed similarly, but those differences could be due to school or individual characteristics.

Table 9 presents evidence that after controlling for other factors, students reclassified by the 5th grade performed on SAT 9 tests (Model 1 and Model 2) about as well as students proficient in English upon entering LAUSD. On the other hand, students reclassified at some point in their education performed better on some of our studied high school outcomes than students initially English proficient. In particular, reclassified students were less likely to fail or drop out of high school and more likely to take AP courses, providing evidence that bilingual students who later acquire English may outperform their monolingual peers (see also Buriel, 1994; Edsource 2008; Rumbaut, 1990; Rumbaut, 1995; Stanton-Salazar and Dornbusch, 1995; Valverde 1987; for similar results).

## Discussion

This analysis clearly demonstrates that reclassification is associated with improved academic performance among English language learners. In particular, we found students reclassified at any point during elementary school or middle school were much more likely to succeed academically when compared with those not reclassified. There were small differences between those reclassified earlier and those reclassified later, but these differences were not always in the same direction. There were slight differences between natives and immigrants, but the overarching story was consistent.

It is worth considering what our study could not address in terms of shedding light on how and why reclassification leads to the better outcomes. First, which students get reclassified as English proficient or functional? It might be the case that schools act strategically to reclassify the highest performing students in order to avoid having the test scores of limited-English students show up in official statistics. Research has not documented this specifically with English learners, but other research has demonstrated that the introduction of high-stakes testing in schools can increase placements in special education (Jacob, 2005).

Such strategic placements, if occurring, would rightly generate skepticism for the results of this study. Yet two aspects of our research clearly show that any potential strategizing on the part of the district would not be driving the positive results for reclassified students. First, we included the academic performance of students in 6th grade as a control for previous factors that we do not observe in our data set. To the extent that unobserved factors can lead to both high performance on 6th grade tests and a higher likelihood of being reclassified, then this variable will account for any spurious positive correlation between reclassification and academic outcomes. Further, estimates comparing reclassified students with students who enter LAUSD as English-proficient suggest that students who are reclassified as 'functional' perform similarly to those who are reclassified as "proficient." This again provides evidence that the observed effects cannot be due solely to some sort of quiet selection of higher performing students for reclassification.

So what is driving the relationship between academic performance and reclassification? Possibly the acquisition of a second language has important academic benefits as previously noted in the literature (Peal and Lambert, 1962; Hakuta, 1986; Bialystock and Hakuta, 1994). On the other hand, it may be the case that students who remain classified as English language learners receive inferior academic instruction (Gandara and Rumberger, 2003). Our longitudinal study, unfortunately, cannot analyze these possible factors, but they are worth considering for future research endeavors.

## Conclusion

In sum, our study showed that fluency in English is one of the factors most strongly associated with higher performance in every academic outcome. In turn, English language learning and reclassification are two of the most influential processes shaping the educational trajectories of language minorities. Students who are reclassified in elementary school or at any time in middle school have significant positive benefits in predicting educational success.[10]

We further found that the relationship between reclassification and academic outcomes was larger for foreign-born students than for native-born students, although the average effect of being an immigrant is very similar to being native-born for our studied outcomes. Finally, there is evidence that students who are reclassified outperform students that are English-only or initially English proficient after controlling for all other factors.

[10] A national study of ELL students with no proficiency in English recommends that ELL students not be placed in short-term programs of one to three years in duration. The minimum number of years recommended for ELL classes by other scholars is five to seven years. Our data suggests most students are reclassified after 4th grade so they likely have spent at least five years in ELL classes.

Also noted in our study is the fact that a significant number of students (15% of the overall student population) remain in English learning classes through the end of the 8th grade. Among this group of students, more than two-thirds are native-born students.

It is important to emphasize that these findings should not be interpreted as supporting a particular pedagogy for teaching ELLs. The debate about the best method for teaching ELLs has been ongoing in California, most recently with Proposition 227, which required schools to teach ELLs through sheltered English immersion and suggested that ELLs remain in sheltered classes for only one year. When the law took effect, the cohort analyzed in this study was starting middle school. Our results indicate that whether students were reclassified before or after Prop 227 did not alter the significant positive effects of reclassification.

## Policy Recommendations

1) Providing resources to English learners should begin early and continue through elementary and middle school for two reasons. First, early English language learning and later reclassification are associated with improved academic outcomes. Second, 76% of students not reclassified as English proficient by 8th grade had arrived at LAUSD before the first grade. Of these students who were not reclassified by the end of middle school, roughly half failed the 9th grade. Further, this population is majority native-born. Efforts must focus on why these students remain in the system so long without being reclassified.

2) The school district, elected officials, and community leaders should stress to the parents of ELL students the importance of English language learning. Parents should be aware of the benefits associated with acquisition of English language proficiency, and be given plenty of opportunities to hear the message that their children will more likely succeed in school if they acquire fluency in English.

3) English language learning should continue into middle school. Our research clearly shows a strong relationship between reclassification during middle school and academic outcomes; it is not too late to affect the educational trajectory of students at risk of dropping out. In fact, reclassification in 7th and 8th grades had a similar positive effect on academic performance as earlier elementary school reclassification. Future LAUSD education policies will benefit students, teachers, schools, and ultimately the greater community if they address how middle school students can best be prepared and exposed to English language learning and reclassification.

4) Scholarly literature with rigorous evaluative methodology of what improves second language acquisition is certainly increasing. ELL programs should work to keep abreast of these new developments and make decisions based on implications for current instructional pedagogy at different school levels.

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# Appendix A

In the LAUSD, students who report speaking a second language at home are administered a test to determine placement in mainstream or English language learning classes. Students who pass are considered "Initially-fluent" and enter the same classes as English-only students. However, students who do not pass are considered to be "English language learners," (ELLs) and are placed in English language learning classes. Prop 227 struck down the legality of bilingual education programs; as a result, English is the language of instruction in virtually all English language learning classes.

Within the English language learner (ELL) category, some persist in English language learning classes throughout their entire educational experience, while others are later redesignated as fluent-English-proficient (RFEP). We refer to RFEPs as "reclassified," and those who were ELL at the end of 8th grade as "not reclassified."

Students must attain either a "functional" or "proficient" level of English proficiency to be reclassified in LAUSD. The requirements set out by the LAUSD require that a student obtain A) a score of "basic" in the CST English test, B) a "C" or higher in ESL 3 or ESL 4, and C) a "4" or "5" in each of the three sections of the CELDT (reading, writing, and listening-speaking), in the same year, in order to be reclassified. There is controversy over the subjective nature of language placement; for example, the listening-speaking portion of the CELDT test is administered orally. In addition, a recent article by Artiles et al (2005) finds discrepancies among minority students in educational programs. Among minority students, low socio-economic status (SES) ELLs were overrepresented in learning disability (LD) programs at all grades, while high-SES ELLs were overrepresented in language and speech (LAS) programs in elementary schools (Artiles et al, 2005).

# Appendix B. Variable List

**Student Level Variables**

| | |
|---|---|
| Female | Dummy variable coded 1 if female, 0 if male |
| Foreign-Born | Dummy variable coded 1 if non-US born, 0 if US-born |
| Hispanic | Dummy variable coded 1 if Hispanic, 0 if non-Hispanic |
| Asian | Dummy variable coded 1 if Asian, 0 if non-Asian |
| Black | Dummy variable coded 1 if Black, 0 if non-Black |
| Reduced or Free Lunch | Dummy variable coded 1 if recipient of reduced or free lunch, 0 if not |
| 6th Grade Reading | 6th Grade SAT9 Reading score, national percentile (1-100) |
| 6th Grade Math | 6th Grade SAT9 Math score, national percentile (1-100) |
| Changed Schools 6th 8th | Coded 1 if changed schools between 6th and 8th grade, 0 if not |
| Changed Schools in HS | Coded 1 if changed schools during or after 9th grade, 0 if not |

**School Level Variables**

| | |
|---|---|
| Title 1 Status | Dummy variable coded 1 if title 1 school, 0 if not |
| Multiple Tracks | Dummy variable coded 1 if school has more than one calendar track, 0 if not |
| % Teachers Full Credential | Percent of school's teachers fully credentialed |
| % Not Proficient by 5th Grade | Percent of school's students not English proficient by the 5th grade, in 8th grade |
| % Not Proficient by 8th Grade | Percent of school's students not English proficient by the 8th grade, in 9th grade |
| % Foreign-born | Percent of school's students foreign-born |
| % Own Racial Group | Percent of school's students in respondents' racial category |

**Reclassification Variables**

| | |
|---|---|
| English Only | Coded 1 if 'English Only' student, 0 if not |
| Initially-Fluent | Coded 1 if language minority but classified as 'Initially Fluent', 0 if not |
| Functional by 3rd Grade | Coded 1 if reclassified as functional by 3rd grade, 0 if not |
| Functional by 5th Grade | Coded 1 if reclassified as functional in 4th or 5th grade, 0 if not |
| Functional by 7th Grade | Coded 1 if reclassified as functional in 6th or 7th grade, 0 if not |
| Proficient by 3rd Grade | Coded 1 if reclassified as proficient by 3rd grade, 0 if not |
| Proficient by 5th Grade | Coded 1 if reclassified as proficient in 4th or 5th grade, 0 if not |
| Proficient by 7th Grade | Coded 1 if reclassified as proficient in 6th or 7th grade, 0 if not |
| Reclassified by 8th Grade | Coded 1 if reclassified in 8th grade, 0 if not |
| Not Reclassified by 8th Grade | Coded 0 if reclassified as English proficient (or functional), 1 if not |
| Year Classified | Year of level of English proficiency classification (1-12) |

**Dependent Variables**

| | |
|---|---|
| SAT9 Reading | 8th Grade SAT9 Reading score, national percentile (1-100) |
| SAT9 Math | 8th Grade SAT9 Math score, national percentile (1-100) |
| Failing 9th | Coded 1 if 9th Grade status in 10th grade year |
| Dropping Out | Coded 1 if missing school records 8th grade or later, and never returned. |
| Passing CAHSEE | Coded 1 if met California High School Exit Exam (CAHSEE) pass criteria |
| Taking AP Course | Coded 1 if enrolled in at least one AP course in high school (9th-12th grade) |

# Appendix C. Case Selection

| | |
|---|---|
| All LAUSD students with reclassification records (1999-2005) | 350,457 |
| 6th grade students, in 1999, with demographic data | 50,526 |
| Excluding students with missing 8th grade demographic data | 43,723 |
| Excluding students in schools with <100 in grade of cohort | 42,047 |
| Excluding students in special education | 36,696 |
| Excluding students with small sample size (Native-American identified) | 36,578 |
| Excluding English learners with missing reclassification data | 35,249 |
| Excluding English learners with missing classification data | 35,194 |
| Excluding files with missing CDE school data | 31,324 |
| Excluding students transferred out from 8th to 12th grade | 30,249 |
| Excluding files with missing nativity data | 28,710 |

# Appendix D.

**Schools with High ELL Concentration and High Reclassification Rates**

| Charter Schools | Enrollment | % EL | % Reclassified |
|---|---|---|---|
| COMMUNITY CHARTER MIDDLE | 305 | 48.2 | 34.7 |
| JAMES JORDAN MIDDLE | 157 | 43.3 | 30.9 |
| STELLA MIDDLE CHARTER ACADEMY | 328 | 39.0 | 25.0 |
| CALIFORNIA ACADEMY FOR LIBERAL | 256 | 29.3 | 21.3 |
| Charter School Average | | 26.9 | 20.4 |

| Traditional Middle Schools | Enrollment | % EL | % Reclassified |
|---|---|---|---|
| DANIEL WEBSTER MIDDLE | 914 | 37.1 | 29.5 |
| WILLIAM MULHOLLAND MIDDLE | 1,858 | 43.2 | 29.0 |
| FLORENCE NIGHTINGALE MIDDLE | 1,893 | 42.4 | 27.4 |
| JOHN A. SUTTER MIDDLE | 1,619 | 37.6 | 27.1 |
| RICHARD E. BYRD MIDDLE | 1,744 | 43.4 | 26.4 |
| SOUTHEAST MIDDLE | 1,374 | 40.2 | 25.7 |
| JOSEPH LE CONTE MIDDLE | 1,832 | 50.3 | 24.9 |
| FRANCISCO SEPULVEDA MIDDLE | 2,083 | 45.3 | 24.9 |
| VAN NUYS MIDDLE | 1,585 | 43.7 | 23.7 |
| SAN FERNANDO MIDDLE | 1,716 | 50.2 | 23.7 |
| CHRISTOPHER COLUMBUS MIDDLE | 1,167 | 44.1 | 23.7 |
| OLIVE VISTA MIDDLE | 1,847 | 46.7 | 23.5 |
| VISTA MIDDLE | 2,134 | 55.8 | 23.4 |
| WILMINGTON MIDDLE | 2,089 | 37.9 | 23.1 |
| JAMES MADISON MIDDLE | 2,169 | 44.4 | 23.1 |
| HOLLENBECK MIDDLE | 2,437 | 42.9 | 22.6 |
| BRET HARTE PREPARATORY MIDDLE | 1,458 | 40.1 | 22.3 |
| SOUTH GATE MIDDLE | 3,019 | 38.3 | 22.2 |
| BERENDO MIDDLE | 2,316 | 60.6 | 22.2 |
| CHESTER W. NIMITZ MIDDLE | 3,065 | 44.5 | 21.8 |
| Traditional Middle School Average | 36.3 | 21.0 | |

Source: California Department of Education website, for academic year ending 2008

### Table 1. Student Characteristics

| | |
|---|---|
| Native-Born | 78.3% |
| Racial or Ethnic Minority | 90.6% |
| Economically Disadvantaged | 98.0% |
| Schoolmates are Own Race (Mean) | 65.9% |
| Teachers Fully Credentialed (Mean) | 67.8% |
| Attend Multitrack School | 33.0% |

Source: TRPI analysis of LAUSD official records
Note: Excludes students not meeting criteria in Appendix C

### Table 2. Reclassification Year, English Learners

| | |
|---|---|
| 3rd Grade or earlier | 4.6% |
| 4th Grade | 8.9% |
| 5th Grade | 28.6% |
| 6th Grade | 13.4% |
| 7th Grade | 7.2% |
| 8th Grade | 8.1% |
| Not Reclassified by 8th Grade | 29.1% |

Source: TRPI analysis of LAUSD official records

### Table 3. Mean Outcomes by English Level

| | 8th Grade SAT9 Math | 8th Grade SAT9 Reading | Flunked 9th Grade | Dropped Out | Passed CAHSEE | Ever took AP Course |
|---|---|---|---|---|---|---|
| English Only | 41.74 | 46.29 | 21.3% | 41.4% | 32.4% | 16.6% |
| Initially Fluent (IFEP) | 47.65 | 51.54 | 21.5% | 27.7% | 49.5% | 29.4% |
| Reclassified (RFEP) | 37.67 | 37.91 | 25.1% | 23.9% | 37.7% | 26.6% |
| English Learner (LEP) | 18.19 | 13.63 | 47.8% | 46.7% | 5.9% | 4.7% |
| All | 36.06 | 36.91 | 27.8% | 33.2% | 31.2% | 20.0% |
| N= | 26,507 | 26,445 | 23,401 | 28,710 | 28,710 | 28,710 |

Source: TRPI analysis of LAUSD official records

### Table 4. Race/Ethnicity and Nativity, All students

| | 8th Grade SAT9 Math | 8th Grade SAT9 Reading | Flunked 9th Grade | Dropped Out | Passed CAHSEE | Ever took AP Course |
|---|---|---|---|---|---|---|
| NATIVITY | | | | | | |
| Native Born | 36.79 | 38.36 | 27.2% | 32.6% | 32.3% | 20.1% |
| Foreign Born | 33.43 | 31.67 | 30.2% | 35.5% | 27.5% | 19.6% |
| RACE/ETHNICITY | | | | | | |
| White | 58.16 | 59.89 | 13.9% | 39.0% | 53.1% | 28.0% |
| Hispanic | 31.89 | 32.40 | 31.6% | 31.5% | 27.9% | 18.8% |
| Asian | 59.32 | 53.94 | 9.7% | 30.4% | 59.1% | 40.6% |
| Black | 29.92 | 35.83 | 24.7% | 41.2% | 18.5% | 9.7% |
| N= | 26,507 | 26,445 | 23,401 | 28,710 | 28,710 | 28,710 |

Source: TRPI analysis of LAUSD official records

## Table 5. Effect of Reclassification on 8th Grade SAT9 Reading Scores, English Learners

| Variable | MODEL 1 B | MODEL 1 Std. Error | MODEL 2 B | MODEL 2 Std. Error | MODEL 3 B | MODEL 3 Std. Error |
|---|---|---|---|---|---|---|
| Constant | 51.72 *** | 2.61 | 21.88 *** | 2.22 | 5.53 *** | 1.62 |
| **Student Characteristics** | | | | | | |
| White | | | | | | |
| Hispanic | 12.75 *** | 1.12 | 3.50 *** | 0.94 | 0.80 | 0.69 |
| Asian | 7.26 *** | 1.18 | 5.30 *** | 0.98 | 0.46 | 0.72 |
| Black | 3.77 | 4.35 | 2.05 | 3.63 | 1.04 | 2.64 |
| Female | 2.59 *** | 0.33 | 1.50 *** | 0.28 | 0.97 *** | 0.20 |
| Foreign Born | 3.01 *** | 0.37 | 0.94 *** | 0.33 | 1.15 *** | 0.24 |
| Reduced or Free Lunch | 5.06 *** | 1.81 | 3.94 *** | 1.51 | 0.56 | 1.10 |
| Changed Schools btwn 6th and 8th | 3.20 *** | 0.55 | 1.78 *** | 0.46 | 1.47 *** | 0.33 |
| Year Classified | | | 0.34 *** | 0.12 | 0.68 *** | 0.09 |
| **Middle School Characteristics** | | | | | | |
| Title 1 School | 11.62 *** | 0.61 | 11.03 *** | 0.51 | 3.47 *** | 0.38 |
| Multiple Tracks | 0.32 | 0.45 | 1.59 *** | 0.37 | 0.08 | 0.27 |
| % Teachers Full Credential | 0.04 ** | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 |
| % Not Proficient by 5th Grade | 0.18 *** | 0.02 | 0.07 *** | 0.02 | 0.03 ** | 0.01 |
| % Foreign born | 0.19 *** | 0.03 | 0.10 *** | 0.03 | 0.05 ** | 0.02 |
| % Own Racial Group | 0.10 *** | 0.01 | 0.01 | 0.01 | 0.01 * | 0.01 |
| **Reclassification Variables** | | | | | | |
| Not Reclassified by 8th Grade | | | | | | |
| Functional by 3rd Grade | | | 34.33 *** | 1.35 | 9.83 *** | 1.00 |
| Functional by 5th Grade | | | 23.41 *** | 0.60 | 8.51 *** | 0.45 |
| Functional by 7th Grade | | | 17.21 *** | 0.47 | 7.31 *** | 0.35 |
| Functional by 8th Grade | | | 8.60 *** | 0.66 | 4.87 *** | 0.48 |
| Proficient by 3rd Grade | | | 40.66 *** | 0.79 | 11.71 *** | 0.62 |
| Proficient by 5th Grade | | | 28.81 *** | 0.38 | 10.01 *** | 0.32 |
| Proficient by 7th Grade | | | 21.86 *** | 0.58 | 8.43 *** | 0.43 |
| Proficient by 8th Grade | | | 10.63 *** | 0.86 | 6.37 *** | 0.63 |
| **Previous Academic Performance** | | | | | | |
| SAT 9 6th Grade Reading Score | | | | | 0.76 *** | 0.01 |
| Adjusted R squared = | 0.0928 | | 0.3703 | | 0.6665 | |
| N= | 16,291 | | 16,291 | | 16,291 | |

Source: TRPI analysis of LAUSD official records

## Table 6. Effect of Reclassification on 8th Grade SAT9 Math Scores, English Learners

| Variable | MODEL 1 B | MODEL 1 Std. Error | MODEL 2 B | MODEL 2 Std. Error | MODEL 3 B | MODEL 3 Std. Error |
|---|---|---|---|---|---|---|
| Constant | 59.55 *** | 2.57 | 36.21 *** | 2.36 | 17.11 *** | 1.68 |
| **Student Characteristics** | | | | | | |
| White | | | | | | |
| Hispanic | 19.58 *** | 1.10 | 12.20 *** | 1.00 | 3.88 *** | 0.72 |
| Asian | 10.97 *** | 1.17 | 9.39 *** | 1.05 | 2.58 *** | 0.75 |
| Black | 9.57 ** | 4.30 | 8.53 ** | 3.88 | 3.79 | 2.75 |
| Female | 1.13 *** | 0.33 | 1.96 *** | 0.30 | 1.78 *** | 0.21 |
| Foreign Born | 2.27 *** | 0.37 | 0.49 | 0.35 | 0.14 | 0.25 |
| Reduced or Free Lunch | 6.74 *** | 1.76 | 6.26 *** | 1.59 | 3.76 *** | 1.13 |
| Changed Schools btwn 6th and 8th | 2.98 *** | 0.54 | 1.77 *** | 0.49 | 1.31 *** | 0.35 |
| Year Classified | | | 0.59 *** | 0.13 | 0.36 *** | 0.09 |
| **Middle School Characteristics** | | | | | | |
| Title 1 School | 12.55 *** | 0.60 | 11.96 *** | 0.55 | 4.97 *** | 0.39 |
| Multiple Tracks | 1.01 ** | 0.44 | 2.00 *** | 0.40 | 0.45 | 0.28 |
| % Teachers Full Credential | 0.03 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 |
| % Not Proficient by 5th Grade | 0.12 *** | 0.02 | 0.08 *** | 0.02 | 0.04 *** | 0.02 |
| % Foreign born | 0.11 *** | 0.03 | 0.04 | 0.03 | 0.00 | 0.02 |
| % Own Racial Group | 0.15 *** | 0.01 | 0.07 *** | 0.01 | 0.01 | 0.01 |
| **Reclassification Variables** | | | | | | |
| Not Reclassified by 8th Grade | | | | | | |
| Functional by 3rd Grade | | | 27.37 *** | 1.44 | 3.71 *** | 1.04 |
| Functional by 5th Grade | | | 18.93 *** | 0.64 | 2.85 *** | 0.47 |
| Functional by 7th Grade | | | 13.71 *** | 0.50 | 2.16 *** | 0.37 |
| Functional by 8th Grade | | | 8.15 *** | 0.70 | 2.83 *** | 0.50 |
| Proficient by 3rd Grade | | | 31.23 *** | 0.84 | 6.00 *** | 0.63 |
| Proficient by 5th Grade | | | 22.54 *** | 0.41 | 3.70 *** | 0.32 |
| Proficient by 7th Grade | | | 16.55 *** | 0.61 | 2.56 *** | 0.45 |
| Proficient by 8th Grade | | | 10.73 *** | 0.91 | 4.71 *** | 0.65 |
| **Previous Academic Performance** | | | | | | |
| SAT 9 6th Grade Math Score | | | | | 0.68 *** | 0.01 |
| Adjusted R squared = | 0.1279 | | 0.2906 | | 0.6425 | |
| N= | 16,461 | | 16,461 | | 16,461 | |

Source: TRPI analysis of LAUSD official records

## Table 7. Effect of Reclassification, English Learners

| Variable | MODEL 1 Failing 9th Odds | MODEL 2 Dropping Out Odds | MODEL 3 Passing CAHSEE Odds | MODEL 4 Taking AP Course Odds |
|---|---|---|---|---|
| **Student Characteristics** | | | | |
| White | | | | |
| Hispanic | 0.90 | 1.05 | 0.62 *** | 0.85 |
| Asian | 1.00 | 0.99 | 1.37 ** | 1.70 *** |
| Black | 0.36 | 1.12 | 1.08 | 2.53 * |
| Female | 0.63 *** | 0.83 *** | 0.81 *** | 2.11 *** |
| Foreign Born | 0.99 | 1.07 | 0.97 | 0.97 |
| Reduced or Free Lunch | 0.66 * | 0.63 ** | 1.27 | 0.97 |
| Changed Schools btwn 6th and 8th | 1.54 *** | 1.99 *** | 0.70 *** | 0.66 *** |
| Changed Schools in HS | | 0.24 *** | | 0.83 ** |
| Year Classified | 0.93 *** | 1.07 *** | 1.04 * | 1.08 *** |
| **Middle School Characteristics** | | | | |
| Title 1 School | 1.00 | 0.77 *** | 0.70 *** | 0.90 |
| Multiple Tracks | 1.09 | 0.99 | 1.21 *** | 0.77 *** |
| % Teachers Full Credential | 1.01 *** | 0.99 *** | 1.00 | 0.99 ** |
| % Not Proficient by 5th Grade | 1.00 | 1.01 ** | 1.00 | 1.01 *** |
| % Foreign born | 1.03 *** | 1.00 | 1.01 | 1.00 |
| % Own Racial Group | 1.00 | 1.00 | 1.00 | 1.00 |
| **High School Characteristics** | | | | |
| Title 1 School | 0.77 *** | 0.96 | 1.06 | 1.41 *** |
| Multiple Tracks | 0.83 *** | 0.83 *** | 0.93 | 0.93 |
| % Teachers Full Credential | 1.01 ** | 1.01 ** | 1.02 *** | 0.97 *** |
| % Not Proficient by 8th Grade | 1.00 | 1.00 | 0.99 *** | 1.00 |
| % Own Racial Group | 1.01 *** | 0.99 ** | 1.01 *** | 1.01 *** |
| **Reclassification Variables** | | | | |
| Not Reclassified by 8th Grade | | | | |
| Functional by 3rd Grade | 0.74 | 0.60 ** | 3.10 *** | 2.34 *** |
| Functional by 5th Grade | 0.86 * | 0.68 *** | 2.63 *** | 2.30 *** |
| Functional by 7th Grade | 0.73 *** | 0.59 *** | 2.62 *** | 2.51 *** |
| Functional by 8th Grade | 0.65 *** | 0.52 *** | 2.37 *** | 3.00 *** |
| Proficient by 3rd Grade | 0.73 ** | 0.82 | 2.42 *** | 2.19 *** |
| Proficient by 5th Grade | 0.74 *** | 0.59 *** | 2.75 *** | 2.43 *** |
| Proficient by 7th Grade | 0.74 *** | 0.70 *** | 2.89 *** | 2.28 *** |
| Proficient by 8th Grade | 0.56 *** | 0.49 *** | 2.77 *** | 2.29 *** |
| **Previous Academic Performance** | | | | |
| SAT 9 6th Grade Reading Score | 0.99 *** | 0.99 *** | 1.01 *** | 1.02 *** |
| SAT 9 6th Grade Math Score | 0.97 *** | 0.99 *** | 1.05 *** | 1.03 *** |
| Pseudo R squared = | 0.1059 | 0.0812 | 0.292 | 0.2076 |
| N= | 13,867 | 14,838 | 14,838 | 14,838 |

Source: TRPI analysis of LAUSD official records

## Table 8. Effect of Reclassification by Nativity, English Learners

| Variable | MODEL 1. SAT9 Reading | | | | MODEL 2. SAT9 Math | | | |
|---|---|---|---|---|---|---|---|---|
| | Native | | Foreign Born | | Native | | Foreign Born | |
| | B | Std. Error | B | Std. Error | B | Std. Error | B | Std. Error |
| **Reclassification Variables** | | | | | | | | |
| Not Reclassified by 8th Grade | | | | | | | | |
| Functional by 3rd Grade | 9.43 *** | 1.11 | 9.95 *** | 2.30 | 2.96 ** | 1.16 | 6.66 *** | 2.32 |
| Functional by 5th Grade | 7.27 *** | 0.52 | 11.39 *** | 0.91 | 2.36 *** | 0.55 | 4.06 *** | 0.94 |
| Functional by 7th Grade | 5.65 *** | 0.42 | 10.74 *** | 0.63 | 1.64 *** | 0.44 | 3.26 *** | 0.64 |
| Functional by 8th Grade | 3.86 *** | 0.60 | 6.65 *** | 0.82 | 1.98 *** | 0.62 | 4.31 *** | 0.84 |
| Proficient by 3rd Grade | 10.99 *** | 0.70 | 13.37 *** | 1.33 | 5.79 *** | 0.71 | 6.58 *** | 1.33 |
| Proficient by 5th Grade | 9.04 *** | 0.37 | 12.32 *** | 0.63 | 3.48 *** | 0.38 | 4.18 *** | 0.62 |
| Proficient by 7th Grade | 6.95 *** | 0.51 | 11.69 *** | 0.81 | 1.76 *** | 0.54 | 4.46 *** | 0.82 |
| Proficient by 8th Grade | 5.62 *** | 0.79 | 7.91 *** | 1.04 | 3.95 *** | 0.83 | 6.08 *** | 1.06 |
| Adjusted R squared = | 0.6694 | | 0.6633 | | 0.6362 | | 0.658 | |
| N= | 11,475 | | 4,816 | | 11,580 | | 4,881 | |

| Variable | MODEL 3. Flunked 9th | | MODEL 4. Dropped Out | | MODEL 5. Passed CAHSEE | | MODEL 6. Took AP Course | |
|---|---|---|---|---|---|---|---|---|
| | Native Odds | Foreign Born Odds | Native Odds | Foreign Born Odds | Native Odds | Foreign Born Odds | Native Odds | Foreign Born Odds |
| **Reclassification Variables** | | | | | | | | |
| Not Reclassified by 8th Grade | | | | | | | | |
| Functional by 3rd Grade | 0.63 * | 1.58 | 0.66 | 0.44 | 2.77 *** | 5.57 *** | 2.39 *** | 2.44 ** |
| Functional by 5th Grade | 0.86 | 0.88 | 0.69 *** | 0.65 ** | 2.62 *** | 2.83 *** | 2.29 *** | 2.59 *** |
| Functional by 7th Grade | 0.74 *** | 0.71 *** | 0.62 *** | 0.50 *** | 2.65 *** | 2.70 *** | 2.77 *** | 2.19 *** |
| Functional by 8th Grade | 0.67 *** | 0.61 *** | 0.52 *** | 0.51 *** | 2.32 *** | 2.43 *** | 2.91 *** | 3.17 *** |
| Functional by 3rd Grade | 0.69 ** | 1.04 | 0.85 | 0.74 | 2.54 *** | 2.11 *** | 2.09 *** | 2.89 *** |
| Proficient by 5th Grade | 0.74 *** | 0.77 ** | 0.61 *** | 0.50 *** | 2.90 *** | 2.48 *** | 2.47 *** | 2.55 *** |
| Proficient by 7th Grade | 0.71 *** | 0.84 | 0.70 *** | 0.70 ** | 3.16 *** | 2.44 *** | 2.42 *** | 2.13 *** |
| Proficient by 8th Grade | 0.62 *** | 0.46 *** | 0.47 *** | 0.50 *** | 2.25 *** | 3.72 *** | 1.87 *** | 3.07 *** |
| Pseudo R squared = | 0.1016 | 0.1208 | 0.0861 | 0.0729 | 0.2931 | 0.2957 | 0.2137 | 0.2023 |
| N= | 9,804 | 4,056 | 10,430 | 4,408 | 10,430 | 4,408 | 10,430 | 4,408 |

Source: TRPI analysis of LAUSD official records

## Table 9. Effect of Reclassification, All Students

| Variable | MODEL 1 SAT9 Reading | | MODEL 2 SAT9 Math | | MODEL 3 Failing 9th | MODEL 4 Dropping Out | MODEL 5 Passing CAHSEE | MODEL 6 Taking AP Course |
|---|---|---|---|---|---|---|---|---|
| | B | Std. Error | B | Std. Error | Odds | Odds | Odds | Odds |
| **Reclassification Variables** | | | | | | | | |
| Not Reclassified by 8th Grade | | | | | | | | |
| Functional by 3rd Grade | 9.01 *** | 1.01 | 2.57 ** | 1.04 | 0.77 | 0.51 *** | 3.23 *** | 2.09 *** |
| Functional by 5th Grade | 8.13 *** | 0.45 | 2.21 *** | 0.47 | 0.89 | 0.62 *** | 2.71 *** | 2.17 *** |
| Functional by 7th Grade | 7.08 *** | 0.35 | 1.74 *** | 0.36 | 0.74 *** | 0.54 *** | 2.70 *** | 2.45 *** |
| Functional by 8th Grade | 4.73 *** | 0.49 | 2.64 *** | 0.51 | 0.66 *** | 0.50 *** | 2.43 *** | 2.99 *** |
| Proficient by 3rd Grade | 10.82 *** | 0.60 | 4.83 *** | 0.61 | 0.78 * | 0.68 *** | 2.52 *** | 1.90 *** |
| Proficient by 5th Grade | 9.54 *** | 0.30 | 2.90 *** | 0.31 | 0.77 *** | 0.52 *** | 2.86 *** | 2.25 *** |
| Proficient by 7th Grade | 8.15 *** | 0.43 | 2.05 *** | 0.45 | 0.76 *** | 0.64 *** | 2.98 *** | 2.19 *** |
| Proficient by 8th Grade | 6.27 *** | 0.64 | 4.46 *** | 0.66 | 0.57 *** | 0.45 *** | 2.87 *** | 2.37 *** |
| Initially Fluent | 8.85 *** | 0.39 | 3.36 *** | 0.39 | 0.90 | 0.74 *** | 2.65 *** | 1.55 *** |
| English Only | 8.91 *** | 0.40 | 2.92 *** | 0.41 | 0.88 | 1.22 *** | 1.89 *** | 1.07 |
| R squared = | 0.7204 | | 0.6969 | | 0.1159 | 0.0797 | 0.3056 | 0.2188 |
| N= | 24,879 | | 25,079 | | 20,286 | 21,911 | 21,911 | 21,911 |

Source: TRPI analysis of LAUSD official records